

Claims

The claims are amended as follows:

1-178. (Canceled)

179. (New) An editor for a document assembly system, the editor including at least one user interface component for associating document assembly instructions with selected locations within at least one XML source document,

the document assembly instructions being instructions for use in determining content at corresponding locations of an instance document generated from said at least one XML source document,

wherein said at least one XML source document is valid with respect to a predetermined DTD or schema that does not include said document assembly instructions.

180. (New) The editor as claimed in claim 179, wherein at least one of said document assembly instructions includes one or more references to one or more other document assembly instructions.

181. (New) The editor as claimed in claim 179, wherein said at least one XML source document includes one or more references to document assembly instructions external to said at least one XML source document.

182. (New) The editor as claimed in claim 181, wherein at least one of said one or more references to document assembly instructions includes information that allows one or more of said document assembly instructions to be retrieved from a database.

183. (New) The editor as claimed in claim 179, wherein said at least one XML source document includes said document assembly instructions.

184. (New) The editor as claimed in claim 179, wherein said at least one XML source document includes XML Processing Instructions that include said document assembly instructions.

185. (New) The editor as claimed in claim 179, wherein one or more of said document assembly instructions determine one or more queries, conditions, and/or reusable content for use in determining said content of said instance document.

186. (New) The editor as claimed in claim 179, wherein said at least one XML source document includes one or more references to one or more queries, conditions, and/or reusable content for use in determining said content of said instance document.

187. (New) The editor as claimed in claim 185, wherein the one or more referenced entities are external to said at least one XML source document.

188. (New) The editor as claimed in claim 186, wherein said at least one XML source document includes one or more references to one or more documents defining said one or more queries, conditions, and/or reusable content.

189. (New) The editor as claimed in claim 188, wherein at least one of said one or more documents is stored in a database, and said one or more references include information that allows said at least one document to be retrieved from said database.

190. (New) The editor as claimed in claim 187, wherein said one or more references to said one or more documents are in the form of universal resource indicators.

191. (New) The editor as claimed in claim 186, wherein said one or more documents are XML documents.

192. (New) The editor as claimed in claim 189, wherein said XML documents are valid with respect to a predetermined DTD or schema.

193. (New) The editor as claimed in claim 190, wherein the editor is configured to edit said one or more XML documents defining said one or more queries, conditions, and/or reusable content whilst maintaining the validity of said XML documents with respect to said predetermined DTD or schema.

194. (New) The editor as claimed in claim 179, wherein the associating of at least some of said locations with corresponding ones of said document assembly instructions associates those document assembly instructions with one or more selected portions of said at least one XML source document.

195. (New) The editor as claimed in claim 192, wherein one or more of the document assembly instructions associated with selected portions of said at least one XML source document define one or more conditions that determine whether the one or more corresponding selected portions of said at least one XML source document will be included in said instance document.

196. (New) The editor as claimed in claim 193, wherein at least one of said one or more portions of said at least one XML source document includes one or more XML nodes in said XML source document, and a corresponding condition determines whether said one or more XML nodes will be included in said instance document.

197. (New) The editor as claimed in claim 187, wherein said one or more queries, conditions, and/or reusable content include interview data defining one or more questions for a user, and constraining responses to said questions.

196. (New) The editor as claimed in claim 179, wherein said document assembly instructions include application data that can be parsed as XML.

197. (New) The editor as claimed in claim 187, wherein said document assembly instructions include party instructions referring to attributes of a party defined in one or more of said documents.

198. (New) The editor as claimed in claim 197, wherein said party attributes include one or more of gender and number.

199. (New) The editor as claimed in claim 197, wherein said document assembly instructions include party mapping data mapping one or more parties defined in said document assembly instructions to respective parties of said at least one XML source document.

200. (New) The editor as claimed in claim 199, wherein at least one of said document assembly instructions includes one or more references to one or more other document assembly instructions.

201. (New) The editor as claimed in claim 199, wherein said at least one XML source document includes one or more references to document assembly instructions external to said at least one XML source document.

202. (New) The editor as claimed in claim 199, wherein said at least one XML source document includes said document assembly instructions.

203. (New) The editor as claimed in claim 199, wherein said at least one XML source document includes XML Processing Instructions that include said document assembly instructions.

204. (New) The editor as claimed in claim 199, wherein one or more of said document assembly instructions determine one or more queries, conditions, and/or reusable content for use in determining said content of said instance document.

205. (New) The editor as claimed in claim 199, wherein said at least one XML source document includes one or more references to one or more queries, conditions, and/or reusable content for use in determining said content of said instance document.

206. (New) The editor as claimed in claim 205, wherein the one or more referenced entities are external to said at least one XML source document.

207. (New) A document assembly system, including:

a parser configured to parse at least one XML source document to determine document assembly instructions associated with selected locations within said at least one XML source document, wherein said at least one XML source document is valid with respect to a predetermined DTD or schema that does not include said document assembly instructions; and

an assembly component to generate an instance document from said at least one XML source document by processing said document assembly instructions to determine content at corresponding locations of said instance document.

208. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions include interview data defining one or more interview items that require resolution to determine corresponding content of said instance document.

209. (New) The document assembly system as claimed in claim 208, wherein said assembly component resolves said one or more interview items to determine corresponding content of said instance document.

210. (New) The document assembly system as claimed in claim 209, wherein said assembly component is configured to resolve said one or more interview items by processing additional information obtained by one or more of:

- (i) displaying one or more questions to a user of the system and receiving one or more responses to those questions;
- (ii) querying a database; and
- (iii) invoking a web service.

211. (New) The document assembly system as claimed in claim 209, wherein said assembly component is configured to resolve said one or more interview items by two or more of:

- (i) displaying one or more questions to a user of the system and receiving one or more responses to those questions from the user;
- (ii) querying a database; and
- (iii) invoking a web service.

212. (New) The document assembly system as claimed in claim 209, wherein said assembly component is configured to resolve said one or more interview items by:

- (i) displaying one or more questions to a user of the system and receiving one or more responses to those questions from the user;
- (ii) querying a database; and
- (iii) invoking a web service.

213. (New) The document assembly system as claimed in claim 212, wherein the one or more referenced entities are retrieved from a database.

214. (New) The document assembly system as claimed in claim 212, wherein said at least one XML source document includes one or more references to one or more documents defining said one or more queries, conditions, and/or reusable content.

215. (New) The document assembly system as claimed in claim 214, wherein said one or more references to said one or more documents are in the form of universal resource indicators.

216. (New) The document assembly system as claimed in claim 212, wherein said one or more documents are XML documents.

217. (New) The document assembly system as claimed in claim 215, wherein said XML documents are valid with respect to a predetermined DTD or schema.

218. (New) The document assembly system as claimed in claim 216, wherein the editor is configured to edit said one or more XML documents defining said one or more queries, conditions, and/or reusable content whilst maintaining the validity of said XML documents with respect to said predetermined DTD or schema.

219. (New) The document assembly system as claimed in claim 207, wherein the associating of at least some of said locations with corresponding ones of said document assembly

instructions associates those document assembly instructions with one or more selected portions of said at least one XML source document.

220. (New) The document assembly system as claimed in claim 219, wherein one or more of the document assembly instructions associated with selected portions of said at least one XML source document define one or more conditions that determine whether the one or more corresponding selected portions of said at least one XML source document will be included in said instance document.

221. (New) The document assembly system as claimed in claim 220, wherein at least one of said one or more portions of said at least one XML source document includes one or more XML nodes in said XML source document, and a corresponding condition determines whether said one or more XML nodes will be included in said instance document.

222. (New) The document assembly system as claimed in claim 214, wherein said one or more queries, conditions, and/or reusable content include interview data defining one or more questions for a user, and constraining responses to said questions.

223. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions include application data that can be parsed as XML.

224. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions include party instructions referring to attributes of a party defined in one or more of said documents.

225. (New) The document assembly system as claimed in claim 224, wherein said party attributes include one or more of gender and number.

226. (New) The document assembly system as claimed in claim 224, wherein said document assembly instructions include party mapping data mapping one or more parties defined in said document assembly instructions to respective parties of said at least one XML source document.

227. (New) The document assembly system as claimed in claim 207, wherein said assembly component retrieves text from one or more documents referenced in said at least one XML source file, and includes the retrieved text in said instance document.

228. (New) The document assembly system as claimed in claim 207, wherein said assembly component receives response text from a user, and includes the received text in said instance document.

229. (New) The document assembly system as claimed in claim 207, wherein said assembly component accesses one or more documents referenced in said at least one XML source file to retrieve one or more selected phrases to be used in relation to a party of said at least one XML source file, wherein the party has values for attributes such as gender or number that match the attributes specified for the selected one or more phrases.

230. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions includes one or more instructions to include an item one or more times in said instance document.

231. (New) The document assembly system as claimed in claim 226, wherein said item has a different value for each of said times.

232. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions include at least one instruction associating a variable with textual data, and said assembly component evaluates said variable and includes said textual data in said instance document if said variable has a first value, and omits said textual data from said instance document if said variable has a second value.

233. (New) The document assembly system as claimed in claim 228, wherein said variable is a Boolean variable.

234. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions include at least one instruction to insert a value of a variable at a corresponding location in said instance document.

235. (New) The document assembly system as claimed in claim 207, wherein said document assembly instructions include application data that can be parsed as XML.

236. (New) The document assembly system as claimed in claim 207, wherein said assembly component evaluates one or more variables of said document assembly instructions, and generates said instance document on the basis of the resolved variables.

237. (New) The document assembly system as claimed in claim 207, wherein said evaluating includes accessing a database.

238. (New) The document assembly system as claimed in claim 207, wherein said evaluating includes performing one or more interviews with a user.

239. (New) The document assembly system as claimed in claim 207, wherein said evaluating includes executing one or more functions associated with said one or more logic elements.

240. (New) The document assembly system as claimed in claim 207, wherein said evaluating includes invoking a web service.

241. (New) The document assembly system as claimed in claim 207, wherein said assembly component

maps one or more attributes of one or more parties used in one or more documents to respective attributes used in said at least one XML source document on the basis of mapping data of said at least one XML source document.

242. (New) The document assembly system as claimed in claim 207, including a rendering engine for generating from said instance document an output instance document in at least one output format.

243. (New) A computer-readable storage medium having instructions stored thereon, which when executed cause a machine to perform a set of operations comprising:

generating an instance document from an XML source document for a document assembly system, selected locations within said XML source document being associated with document assembly instructions, wherein said XML source document is valid with respect to a predetermined DTD or schema that does not include said document assembly instructions; and

determining content at locations of the instance document based on corresponding selected locations within said XML source document associated with said document assembly instructions.

244. (New) The computer-readable storage medium as claimed in claim 243, wherein at least one of said document assembly instructions includes one or more references to one or more other document assembly instructions.

245. (New) The computer-readable storage medium as claimed in claim 243, wherein said at least one XML source document includes one or more references to document assembly instructions external to said at least one XML source document.

246. (New) The computer-readable storage medium as claimed in claim 245, wherein at least one of said one or more references to document assembly instructions includes information that allows one or more of said document assembly instructions to be retrieved from a database.

247. (New) The computer-readable storage medium as claimed in claim 243, wherein said at least one XML source document includes said document assembly instructions.

248. (New) The computer-readable storage medium as claimed in claim 243, wherein said at least one XML source document includes XML Processing Instructions that include said document assembly instructions.

249. (New) The computer-readable storage medium as claimed in claim 243, wherein one or more of said document assembly instructions determine one or more queries, conditions, and/or reusable content for use in determining said content of said instance document.

250. (New) The computer-readable storage medium as claimed in claim 243, wherein said at least one XML source document includes one or more references to one or more queries, conditions, and/or reusable content for use in determining said content of said instance document.

251. (New) The computer-readable storage medium as claimed in claim 245, wherein the referenced queries, conditions, and/or reusable content are external to said at least one XML source document.

252. (New) The computer-readable storage medium as claimed in claim 251, wherein at least one of said queries, conditions, and/or reusable content is stored in a database, and at least one of said one or more references includes information that allows the at least one of said queries, conditions, and/or reusable content to be retrieved from a database.

253. (New) The computer-readable storage medium as claimed in claim 251, wherein said at least one XML source document includes one or more references to one or more documents defining said one or more queries, conditions, and/or reusable content.

254. (New) The computer-readable storage medium as claimed in claim 253, wherein said one or more references to said one or more documents are in the form of universal resource indicators.

255. (New) The computer-readable storage medium as claimed in claim 253, wherein said one or more documents are XML documents.

256. (New) The computer-readable storage medium as claimed in claim 255, wherein said XML documents are valid with respect to a predetermined DTD or schema.

257. (New) The computer-readable storage medium as claimed in claim 256, wherein the editor is configured to edit said one or more XML documents defining said one or more queries, conditions, and/or reusable content whilst maintaining the validity of said XML documents with respect to said predetermined DTD or schema.

258. (New) The computer-readable storage medium as claimed in claim 243, wherein the associating of at least some of said locations with corresponding ones of said document assembly instructions associates those document assembly instructions with one or more selected portions of said at least one XML source document.

259. (New) The computer-readable storage medium as claimed in claim 258, wherein one or more of the document assembly instructions associated with selected portions of said at least one XML source document define one or more conditions that determine whether the one or more corresponding selected portions of said at least one XML source document will be included in said instance document.

260. (New) The computer-readable storage medium as claimed in claim 259, wherein at least one of said one or more portions of said at least one XML source document includes one or more XML nodes in said XML source document, and a corresponding condition determines whether said one or more XML nodes will be included in said instance document.

261. (New) The computer-readable storage medium as claimed in claim 243, wherein said one or more queries, conditions, and/or reusable content include interview data defining one or more questions for a user, and constraining responses to said questions.

262. (New) The computer-readable storage medium as claimed in claim 243, wherein said document assembly instructions include application data that can be parsed as XML.

263. (New) The computer-readable storage medium as claimed in claim 253, wherein said document assembly instructions include party instructions referring to attributes of a party defined in one or more of said documents.

264. (new) The computer-readable storage medium as claimed in claim 263, wherein said party attributes include one or more of gender and number.

265. (New) The computer-readable storage medium as claimed in claim 263, wherein said document assembly instructions include party mapping data mapping one or more parties defined in said document assembly instructions to respective parties of said at least one XML source document.

266. (New) The computer-readable storage medium as claimed in claim 255, wherein a reference to an XML document includes party mapping information for mapping a first party used in the referenced document to a second party used in the referring document.

267. (New) The computer-readable storage medium as claimed in claim 249, wherein a condition depends upon one or more other conditions.

268. (New) The computer-readable storage medium as claimed in claim 267, wherein said conditions are related by Boolean operators.

269. (New) The computer-readable storage medium as claimed in claim 255, wherein said XML source document includes an assembly instruction for including in said instance document text defined in a referenced XML document.

270. (New) The computer-readable storage medium as claimed in claim 261, wherein said XML source document includes an assembly instruction for including in said instance document response text provided by said user.

271. (New) The computer-readable storage medium as claimed in claim 239, wherein said XML source document includes an assembly instruction for including an element one or more times in said instance document.

272. (New) The computer-readable storage medium as claimed in claim 271, wherein content of said element is modified for each of said times.

273. (New) A computer-readable storage medium having instructions stored thereon, which when executed cause a machine to perform a set of operations comprising:

generating an instance document from at least one XML source document; and
determining content of said instance document based on an input document for a document assembly system, said input document including one or more queries, one or more conditions, and one or more items of reusable content.

274. (New) The computer-readable storage medium as claimed in claim 273, wherein said input document includes questions to be displayed to a user, and available responses to said questions.

275. (New) The computer-readable storage medium as claimed in claim 273, wherein said input document includes one or more references to one or more other input documents, each of said other input documents including one or more queries, conditions, and/or reusable content for use in determining content of said instance document.

276. (New) The computer-readable storage medium as claimed in claim 275, wherein a reference to an XML document includes party mapping information for mapping a first party used in the referenced document to a second party used in the referring document.

277. (New) The computer-readable storage medium as claimed in claim 275, wherein said input document includes an assembly instruction for including in said instance document text defined in a referenced document.

278. (New) The computer-readable storage medium as claimed in claim 274, wherein said input document includes an assembly instruction for including in said instance document response text provided by said user.

279. (New) The computer-readable storage medium as claimed in claim 273, wherein said input document includes an assembly instruction for including reusable content one or more times in said instance document.

280. (New) The computer-readable storage medium as claimed in claim 274, wherein said reusable content is modified for each of said times.

281. (New) The computer-readable storage medium as claimed in claim 273, wherein said input document is an XML input document.

282. (New) The computer-readable storage medium as claimed in claim 276, wherein said XML input document includes XML elements representing questions to be displayed to a user, and available responses to said questions.

283. (New) The computer-readable storage medium as claimed in claim 276, wherein said XML input document includes one or more references to one or more other XML input documents, each of said other XML input documents including XML elements representing one or more queries, conditions, and/or reusable content for use in determining content of said instance document.

284. (New) The computer-readable storage medium as claimed in claim 279, wherein a reference to an XML document includes party mapping information for mapping a first party used in the referenced document to a second party used in the referring document.

285. (New) The computer-readable storage medium as claimed in claim 281, wherein said XML input document includes an assembly instruction for including in said instance document text defined in a referenced XML document.

286. (New) The computer-readable storage medium as claimed in claim 281, wherein said XML input document includes an assembly instruction for including in said instance document response text provided by said user.

287. (New) The computer-readable storage medium as claimed in claim 281, wherein said XML input document includes an assembly instruction for including an element one or more times in said instance document.

288. (New) The computer-readable storage medium as claimed in claim 287, wherein content of said element is modified for each of said times.